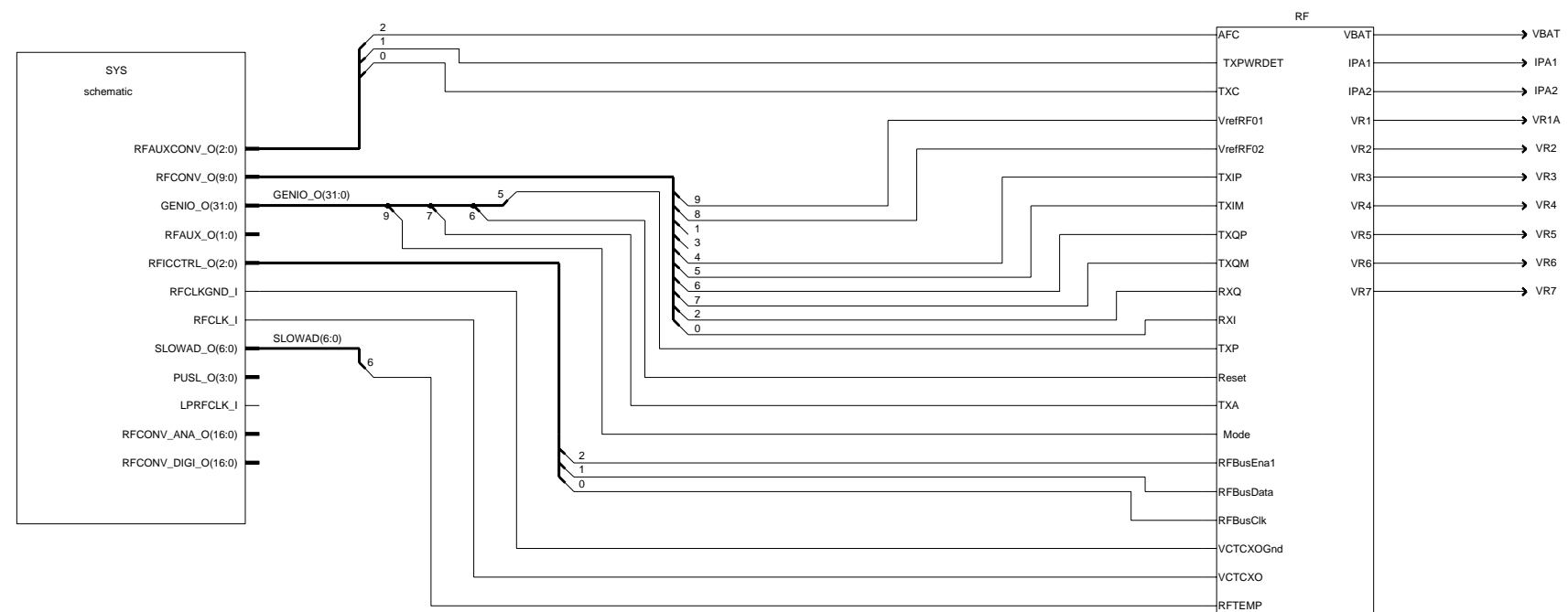
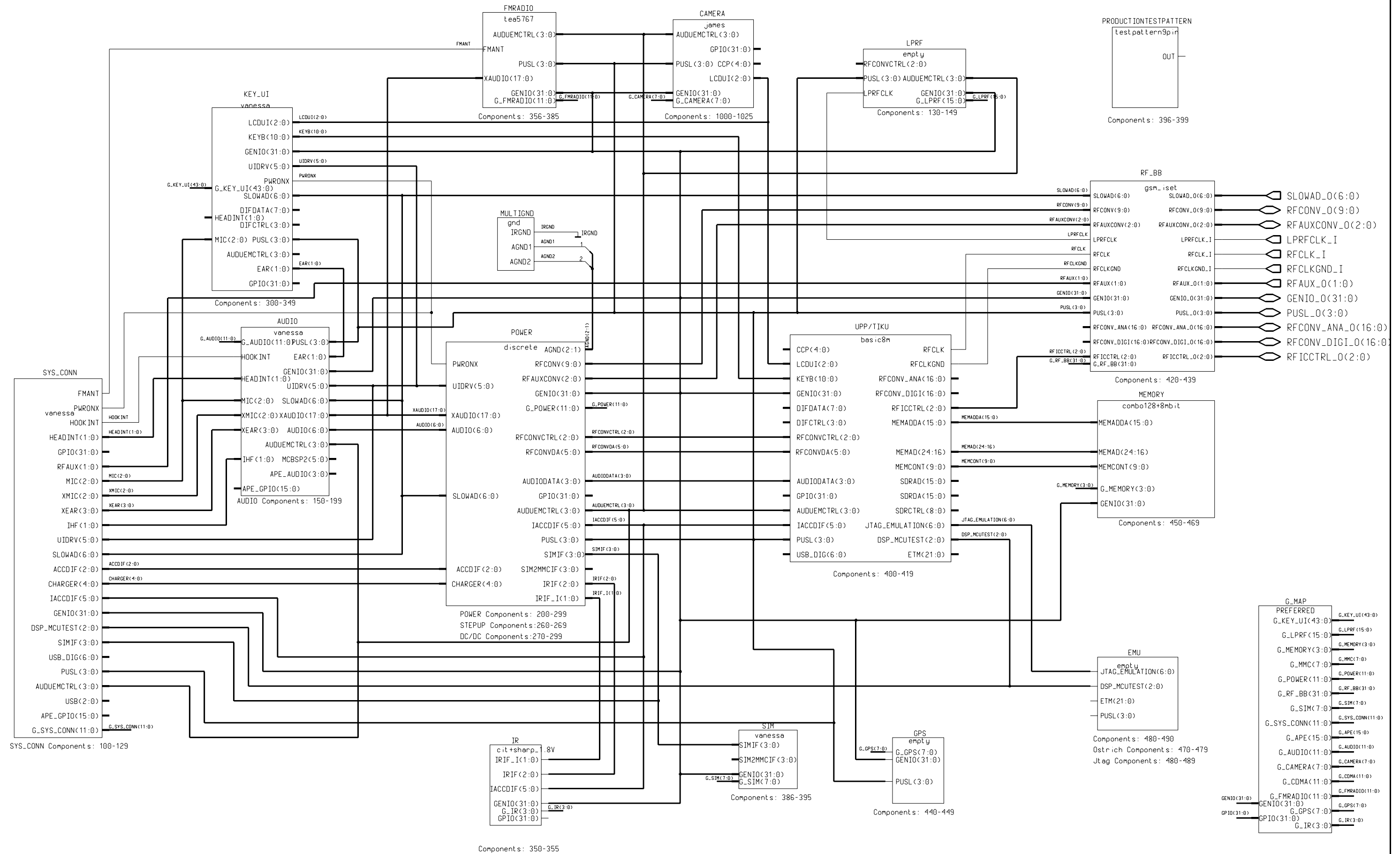



NHL-4J Top Level




DCT4 Common BB



GENIO and GPIO Connection Block


GENIO(31:0) 

GPIO(31:0) 

 G_APE(15:0)


 G_AUDIO(11:0)

 G_CAMERA(7:0)

 G_CDMA(11:0)


 G_FMRADIO(11:0)


 G_GPS(7:0)

 G_IR(3:0)


 G_KEY_UI(43:0)


 G_LPRF(15:0)


 G_MEMORY(3:0)

 G_MMC(7:0)

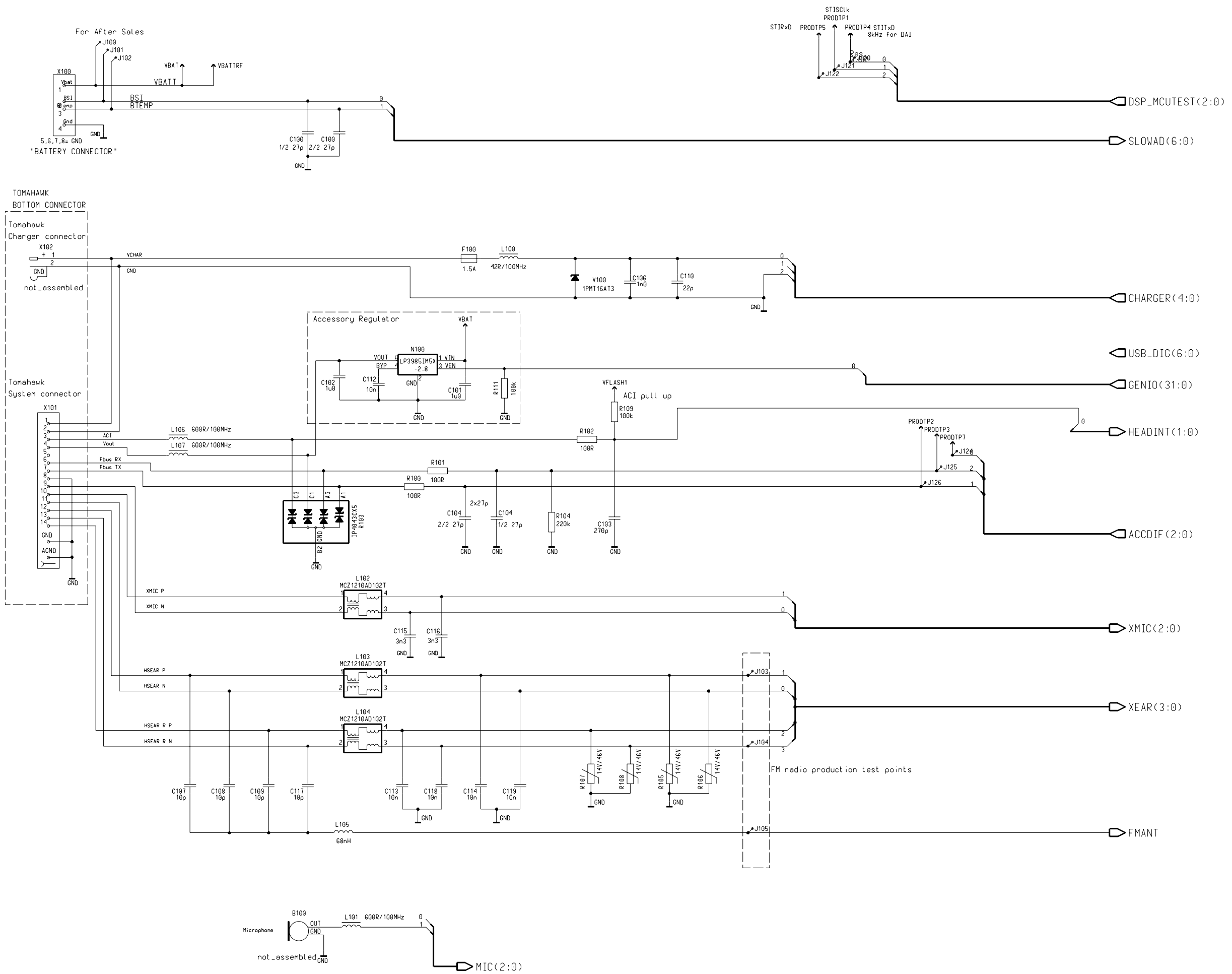
 G_POWER(11:0)

 G_RF_BB(31:0)

 G_SIM(7:0)

 G_SYS_CONN(11:0)



System Connector

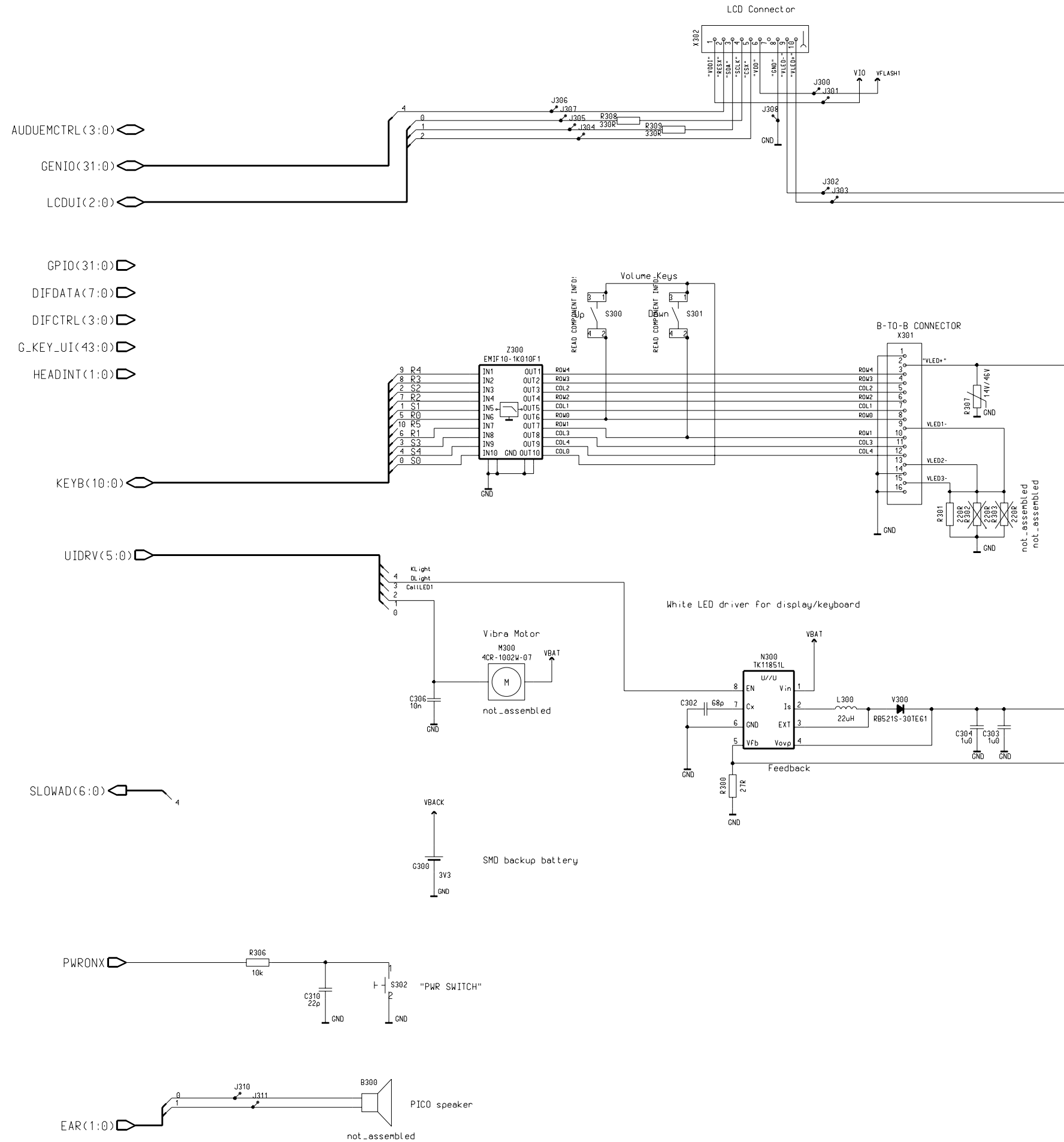


- ▷ PWRONX
- ▷ HOOKINT
- ▷ RFAUX(1:0)
- ▷ UIDRV(5:0)
- ▷ IACCDIF(5:0)
- ▷ SIMIF(3:0)
- ▷ AUDUEMCTRL(3:0)
- ▷ PUSL(3:0)
- ▷ GPIO(31:0)
- ▷ IHF(1:0)
- ▷ USB(2:0)
- ▷ APE_GPIO(15:0)
- ▷ G_SYS_CONN(11:0)

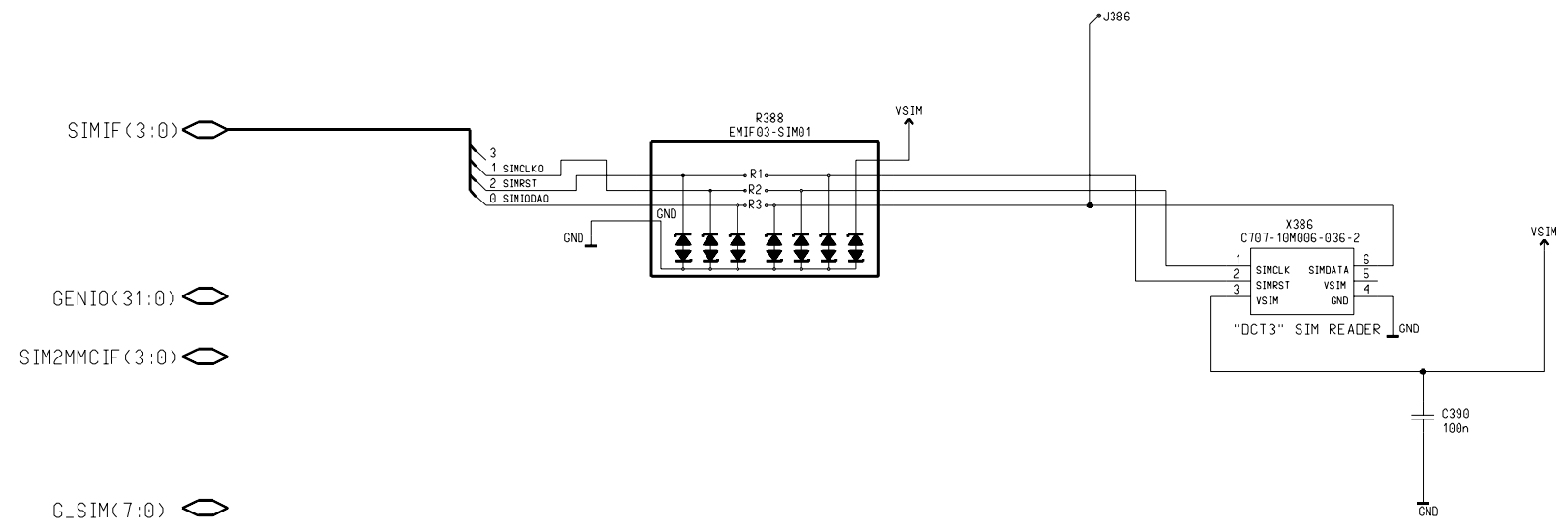
J128

UI

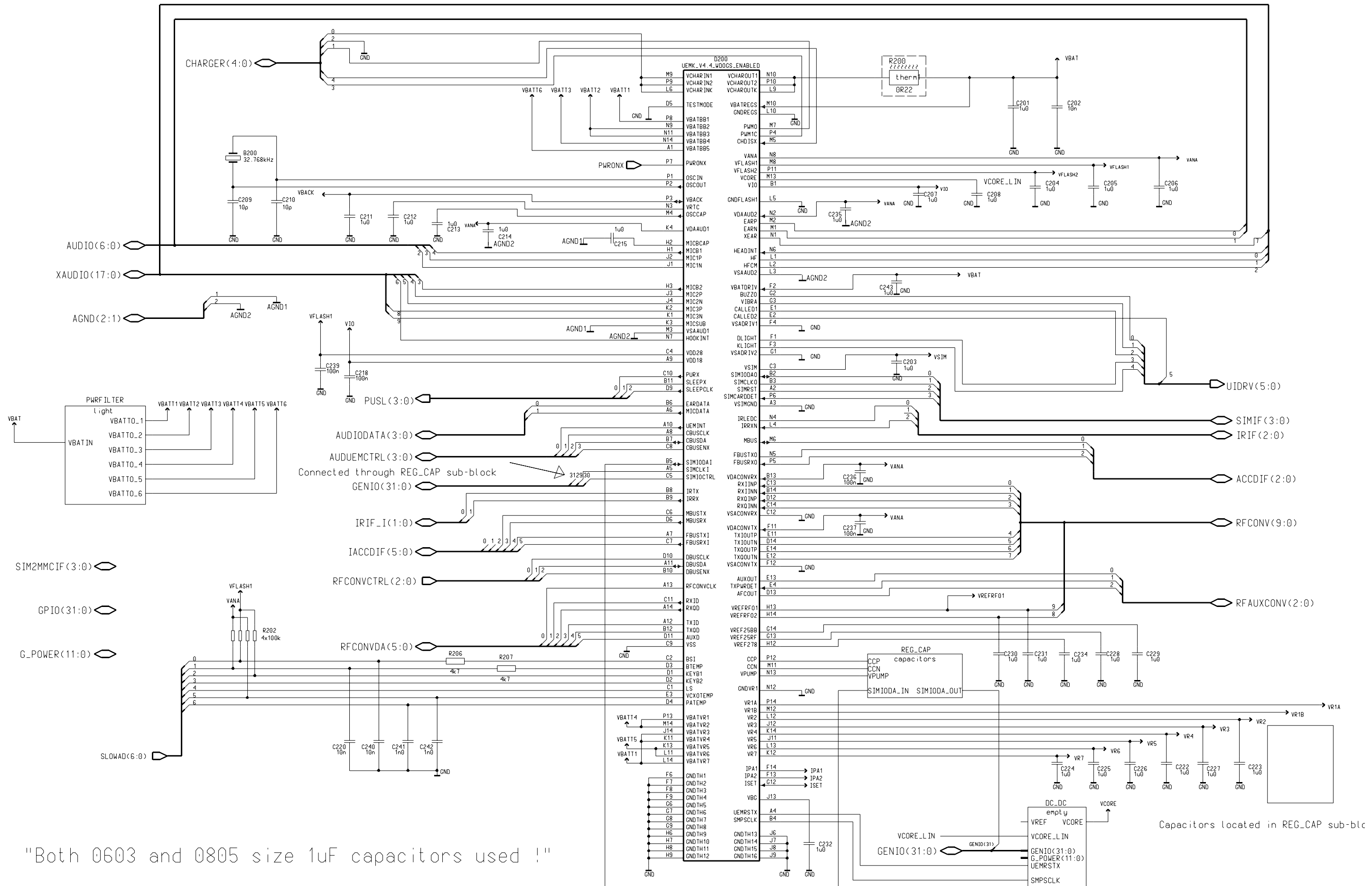
MIC(2:0) 
 PUSL(3:0) 



SIM Reader



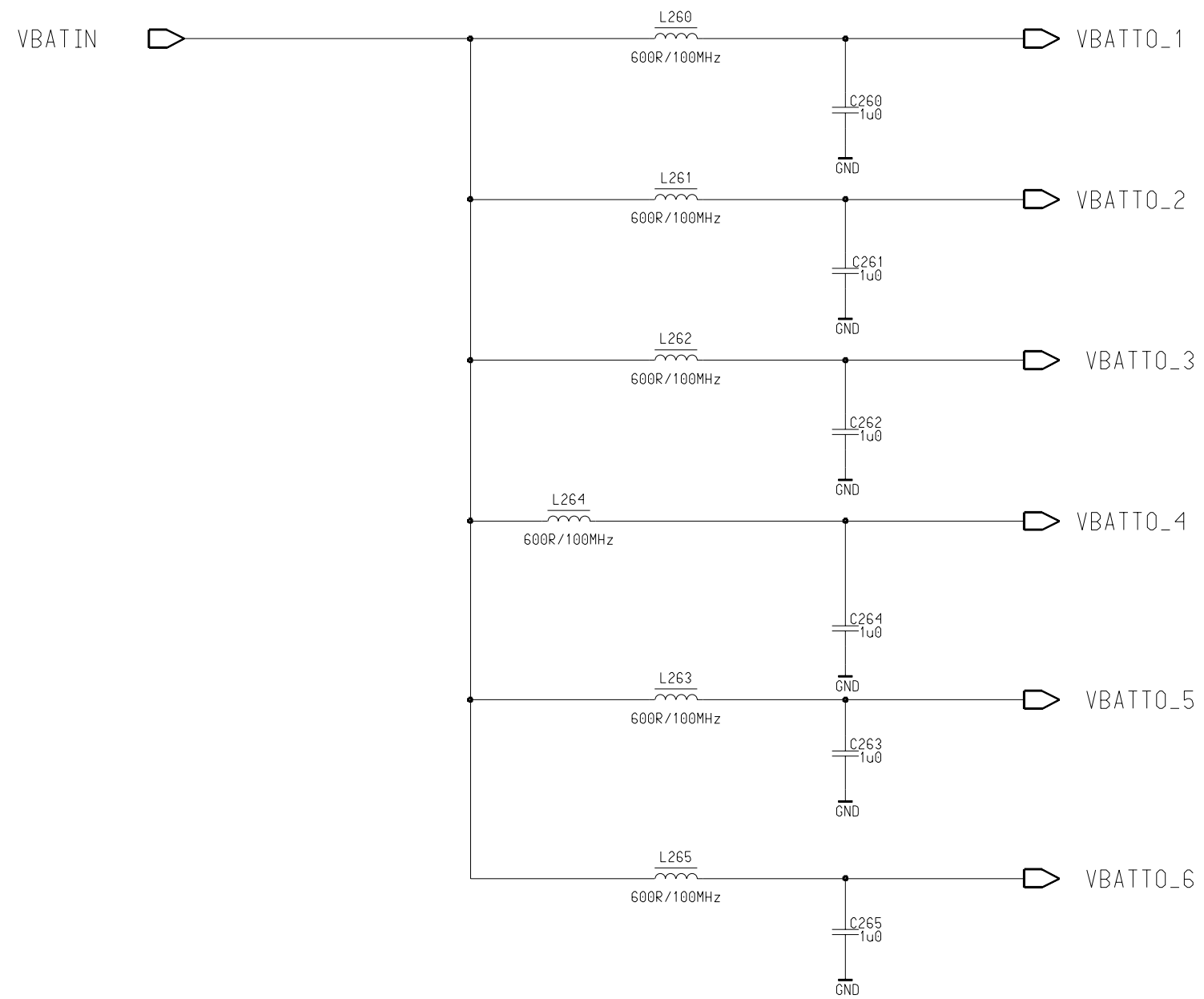
Discrete Power Management



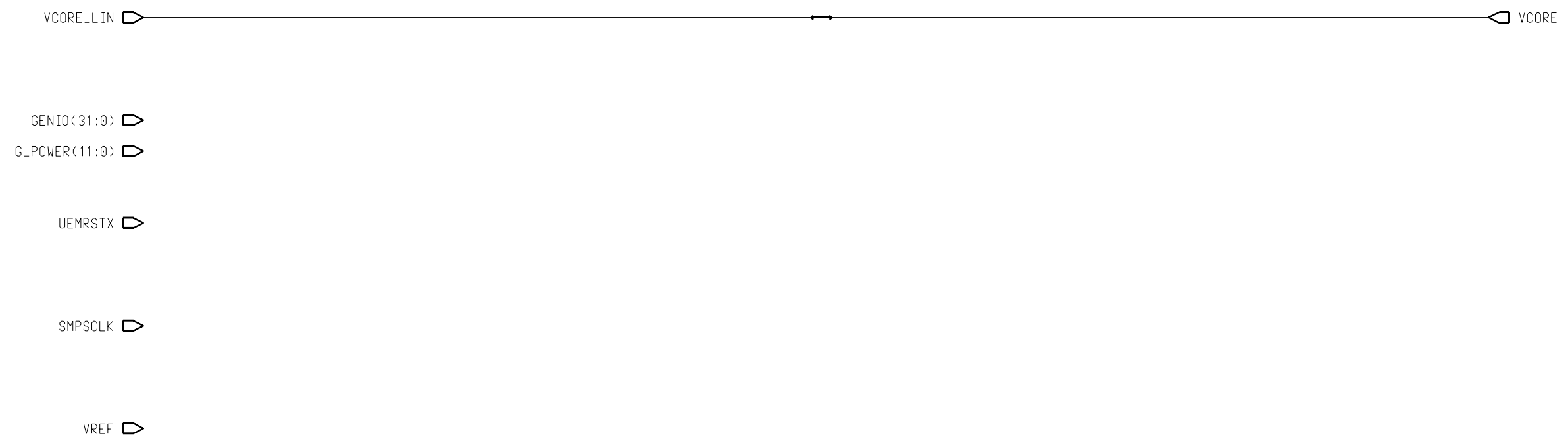
"Both 0603 and 0805 size 1uF capacitors used !"

Used refs in REG_CAP: C238, C200, C219, C233, C221 and R205

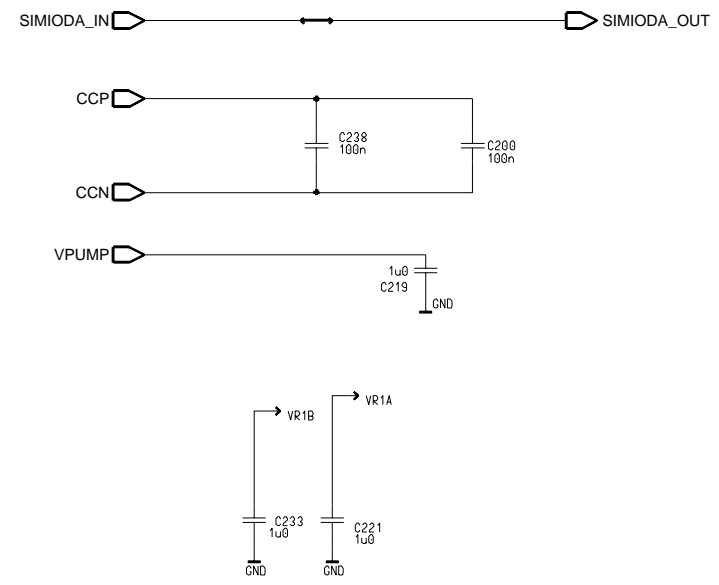
Light Filtering







DC/DC Converter



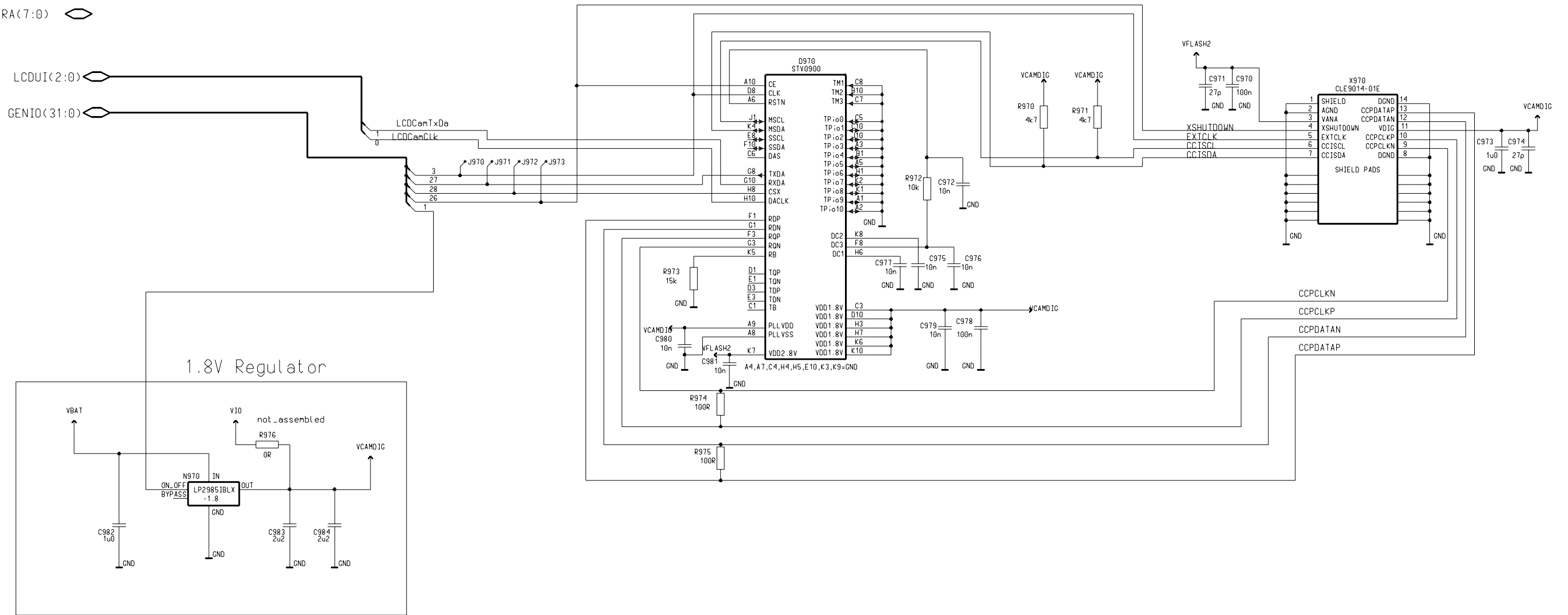
Old Power Discrete



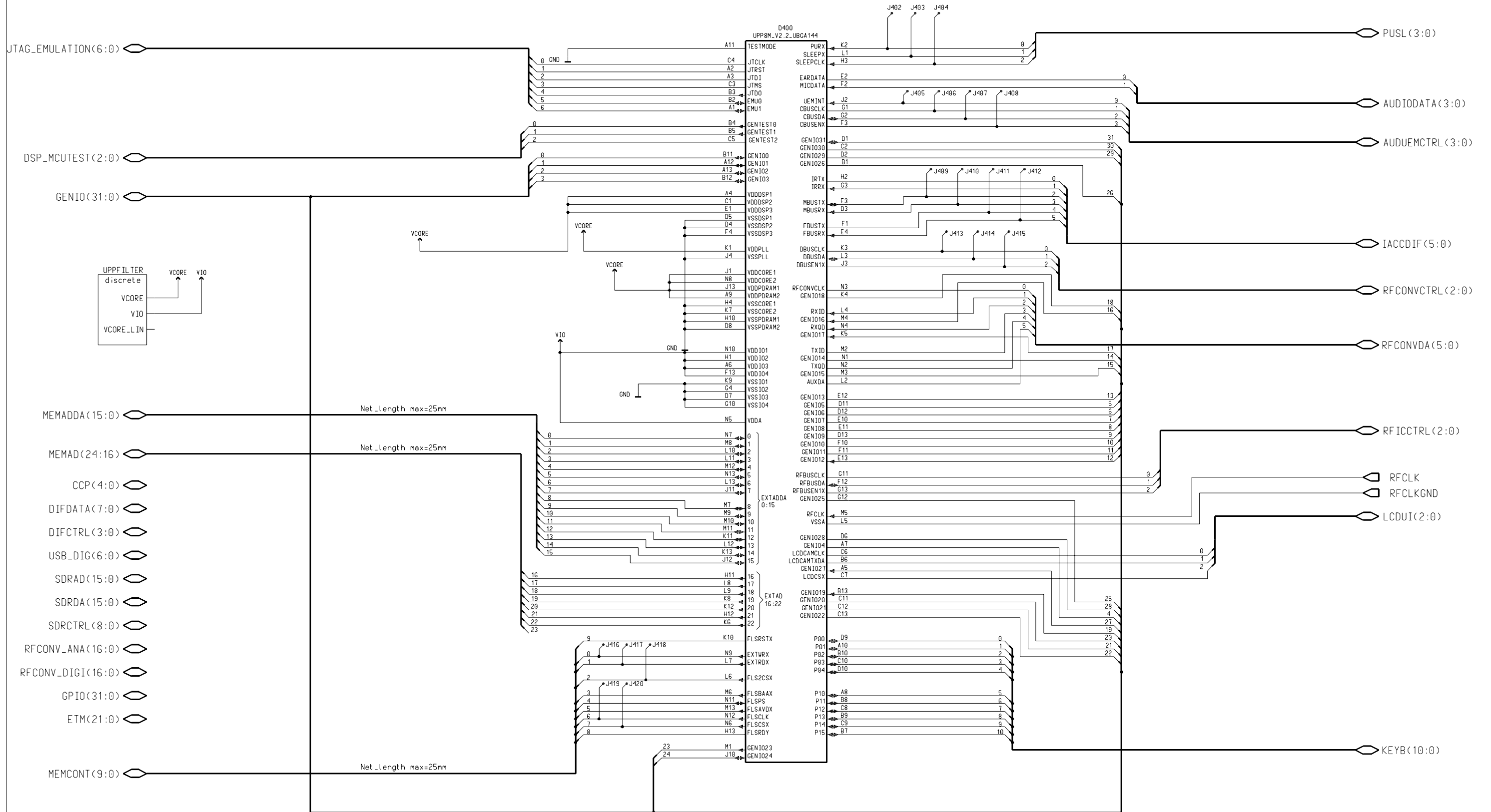
Camera

- GPI0 (31:0) 
- AUDUEMCTRL (3:0) 
- CCP (4:0) 
- PUSL (3:0) 

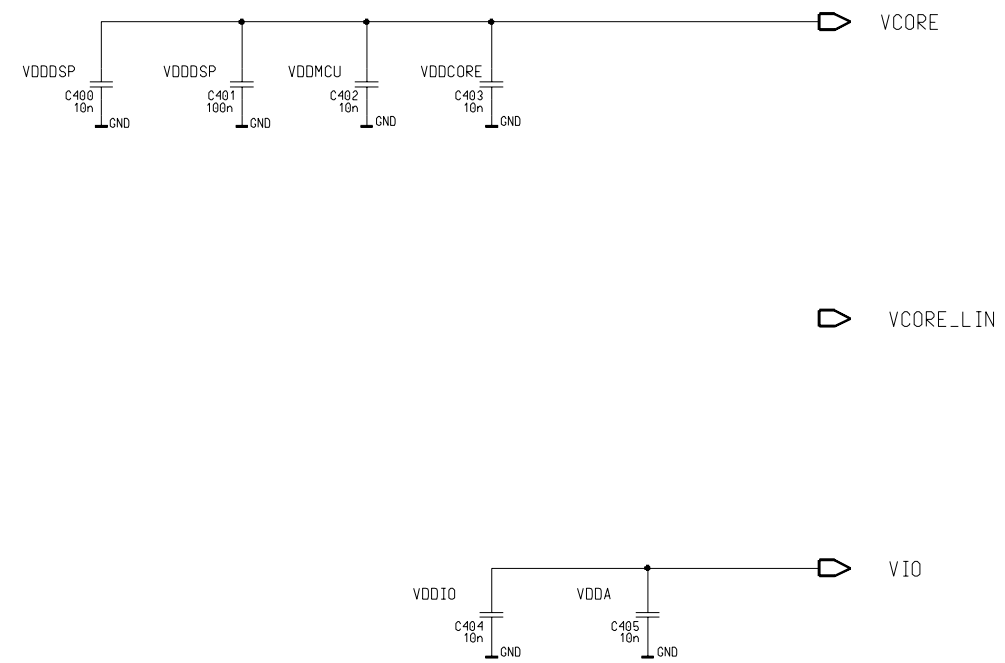
G_CAMERA (7:0) 



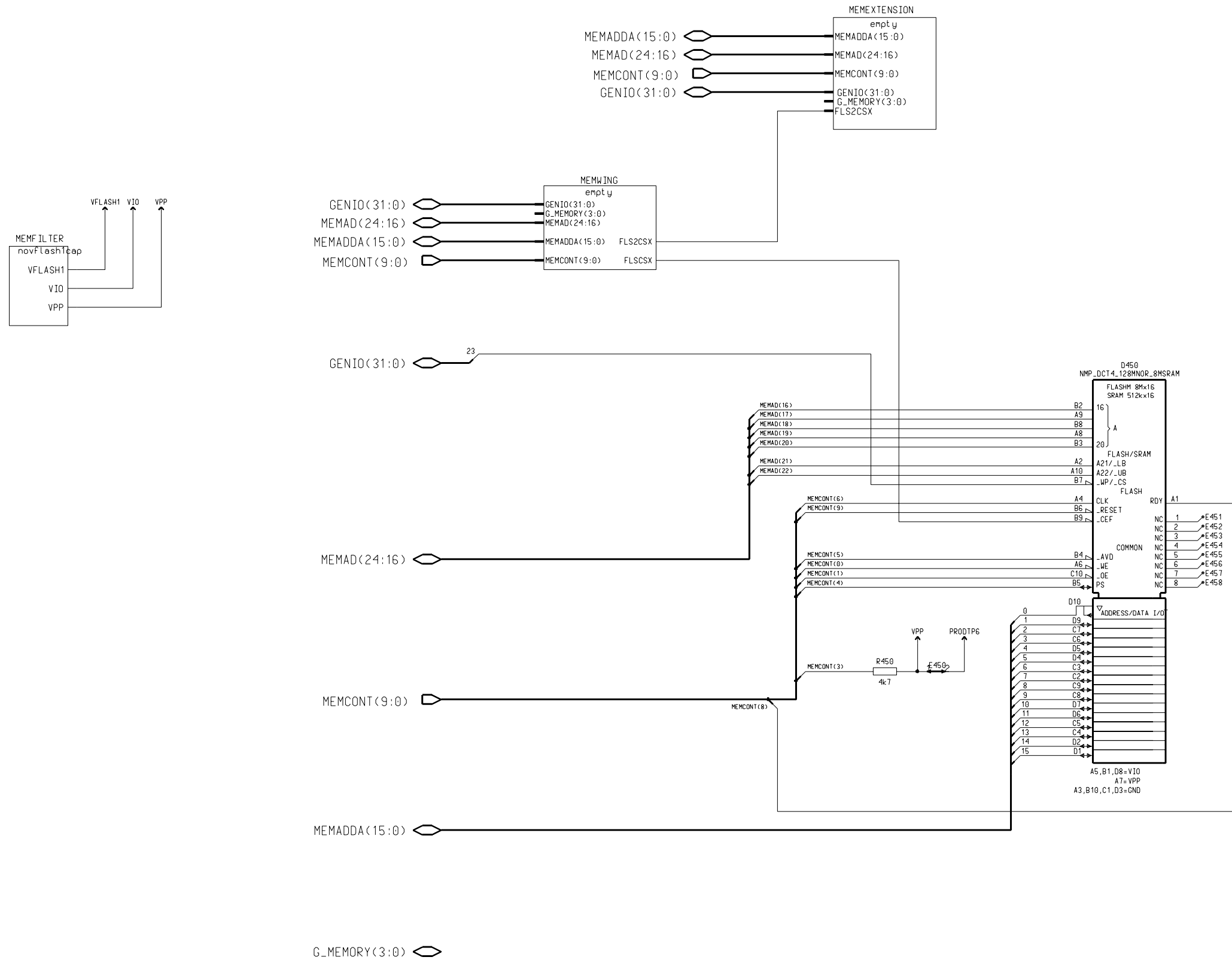
UPP 8M Implementation



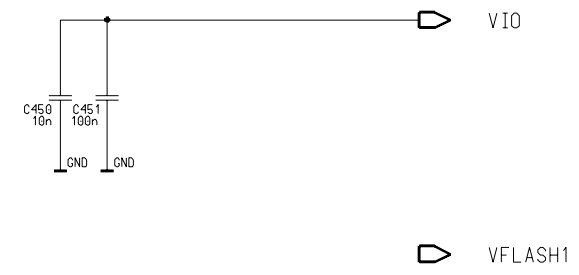
Decoupling Capacitors for UPP



Combo Memory

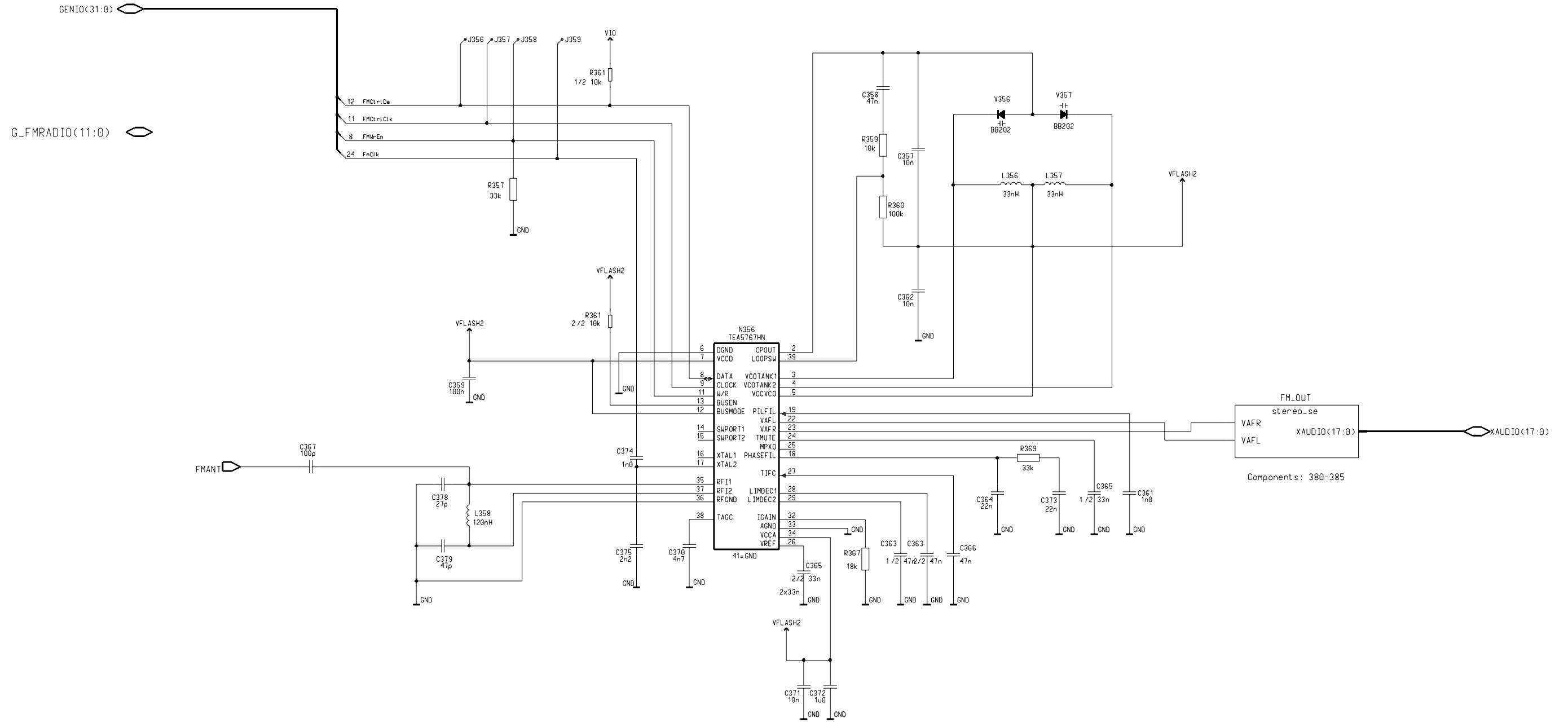


Memory Without VFLASH1



FM Radio

FMCLK = GENIO(24)

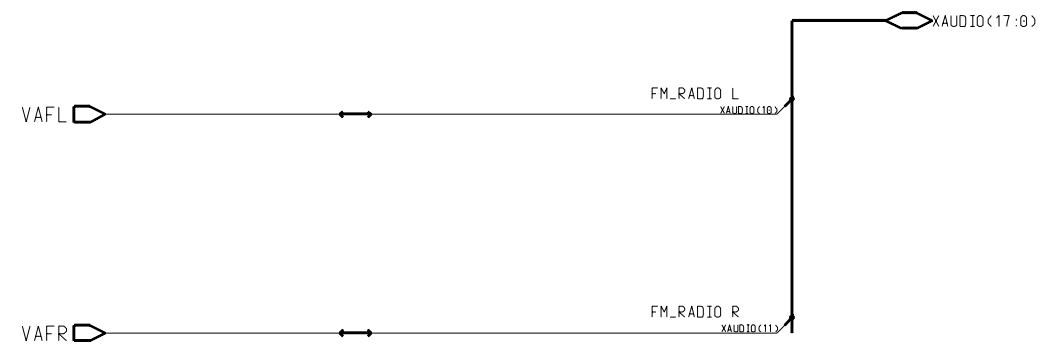


AUDUEMCTRL(3:0)

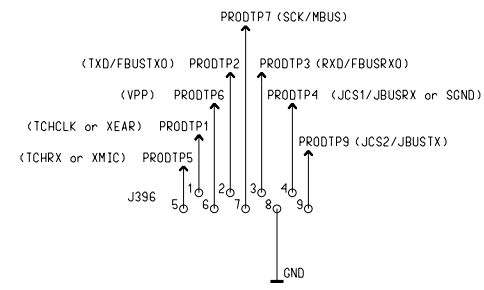
PUSL(3:0)

Notice:
 C374 (1n0) and C375 (2n2) are configured for 32kHz reference clock
 If reference clock is 6.5MHz, use C374 (3p9) and C375 (10p)

FM Radio Out

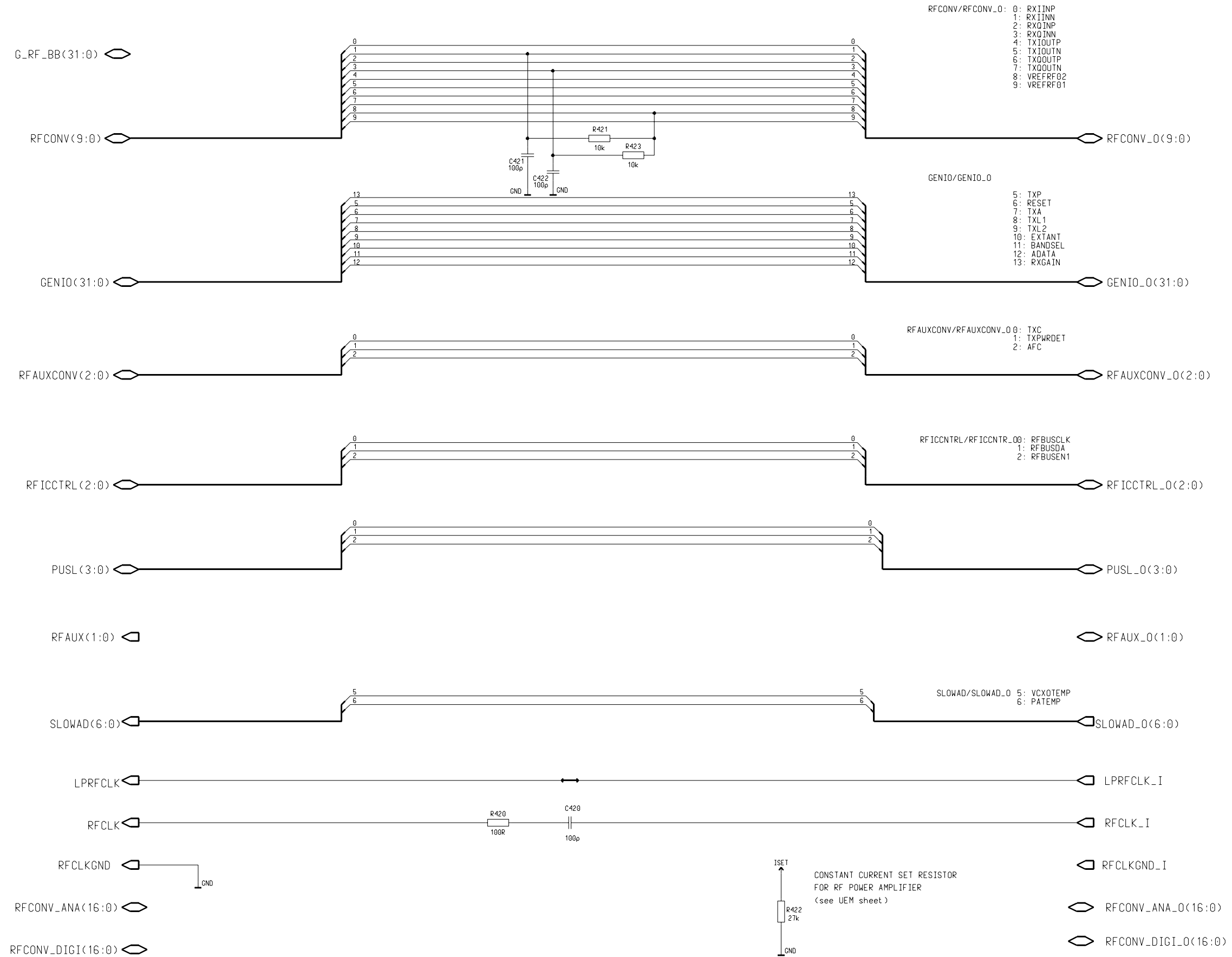


Test Pattern



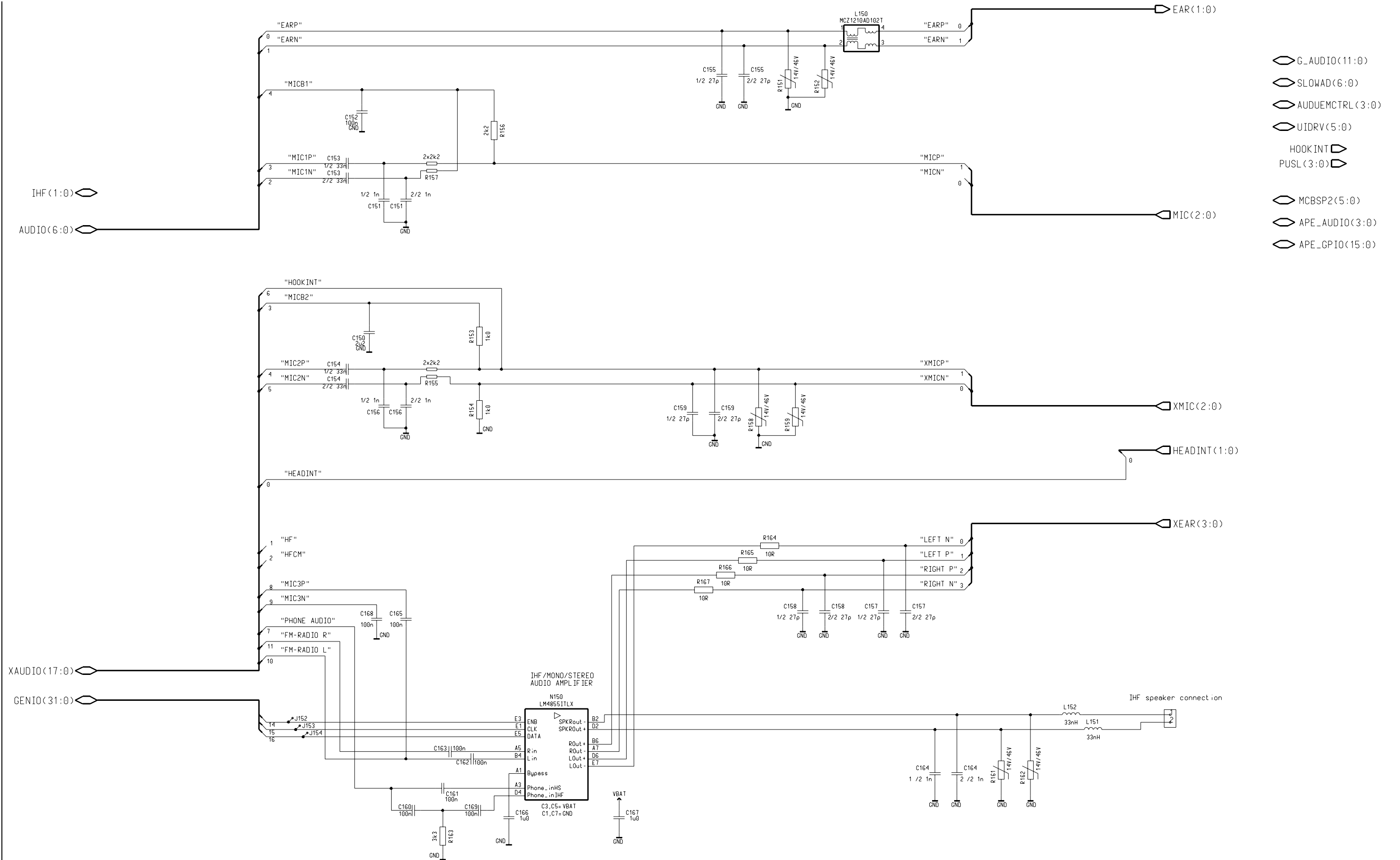
OUT

RF BB Interface

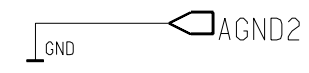
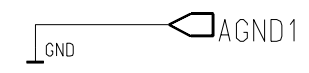
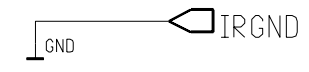


IPA1 AND IPA2 ARE USED IN RF, THE TOLERANCE OF R422 IS 1% (0402, 1430873)

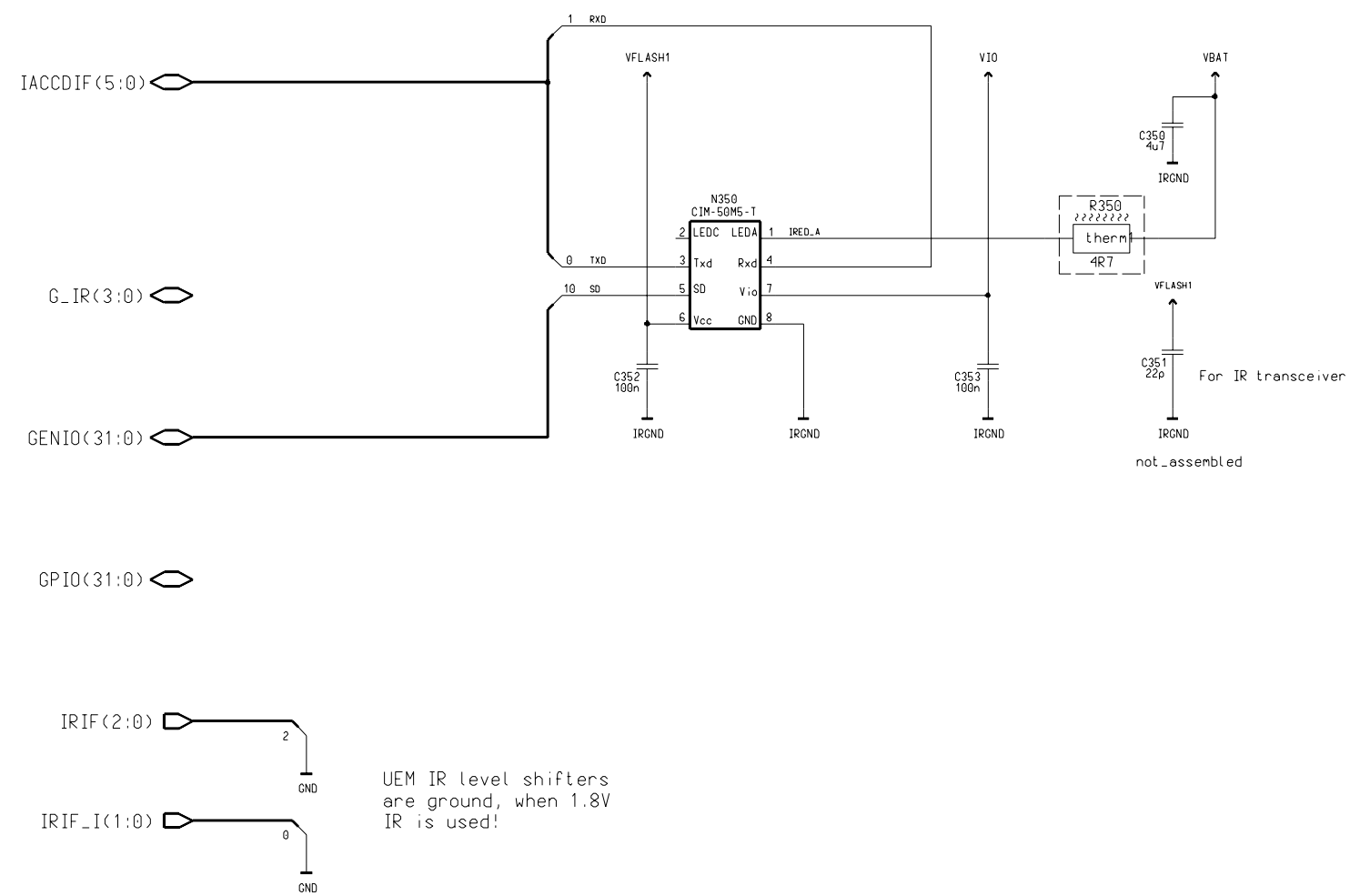
Audio



Multi GND



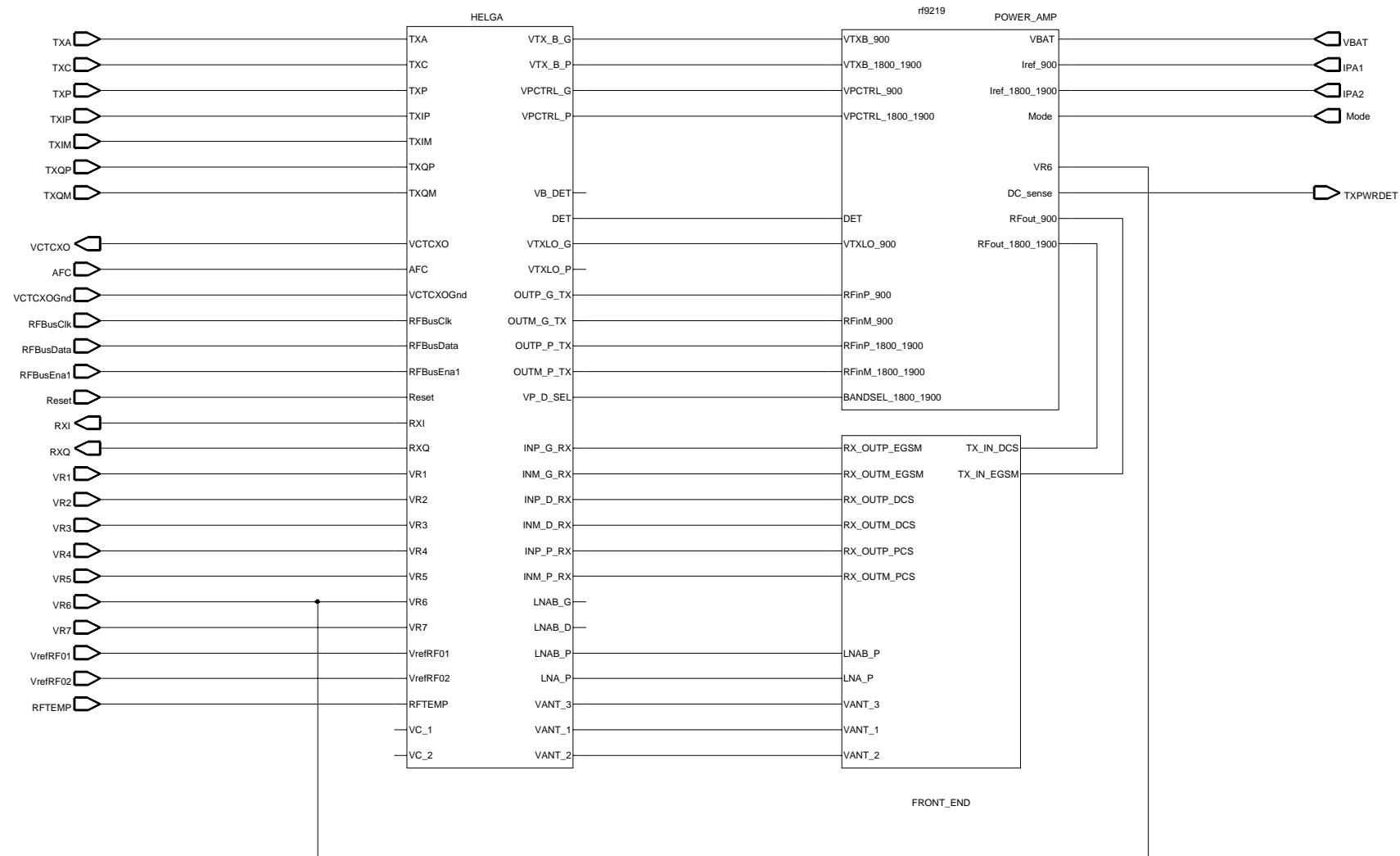
IR Module



Used referenses

- C 350 - 353
- N 350
- R 350

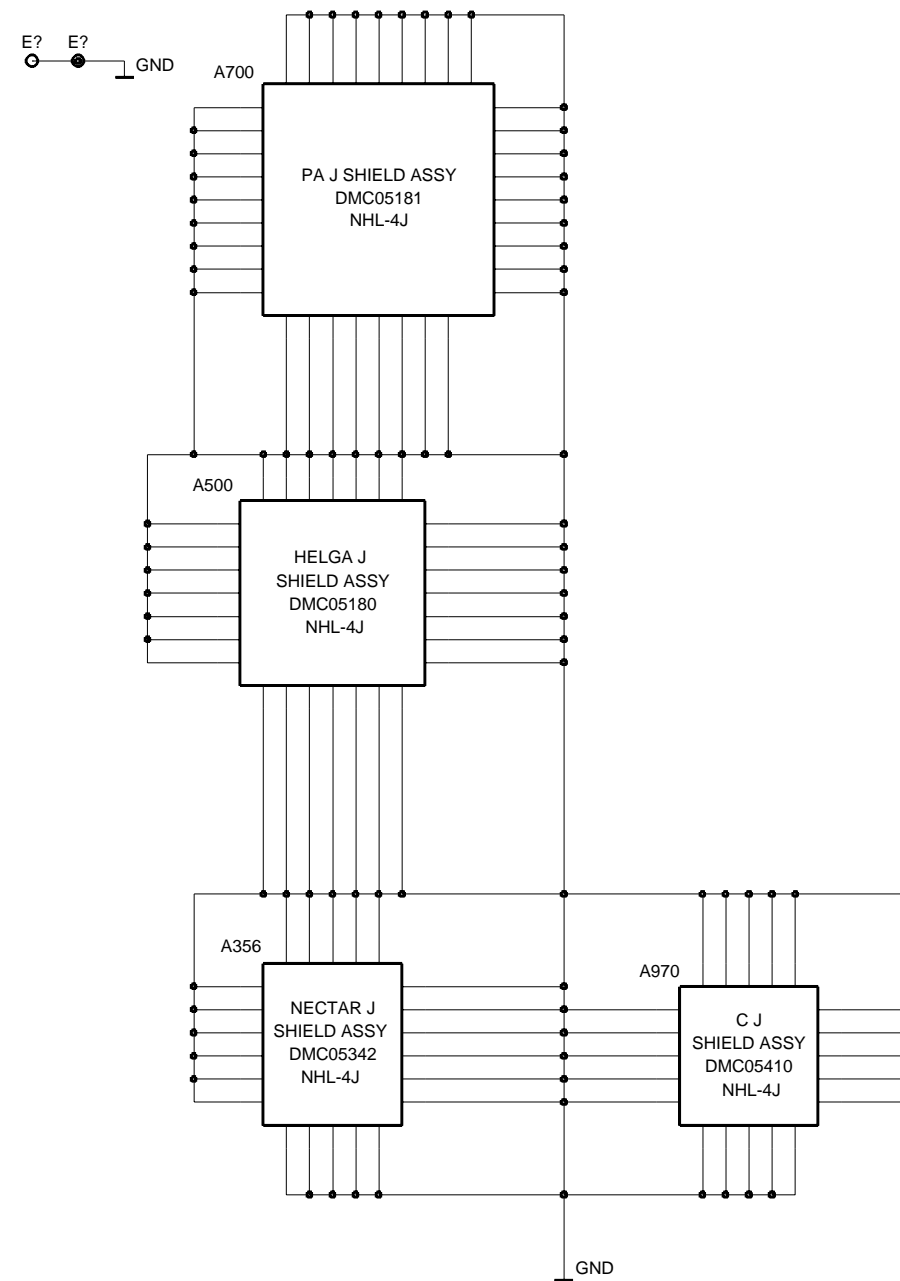
RF



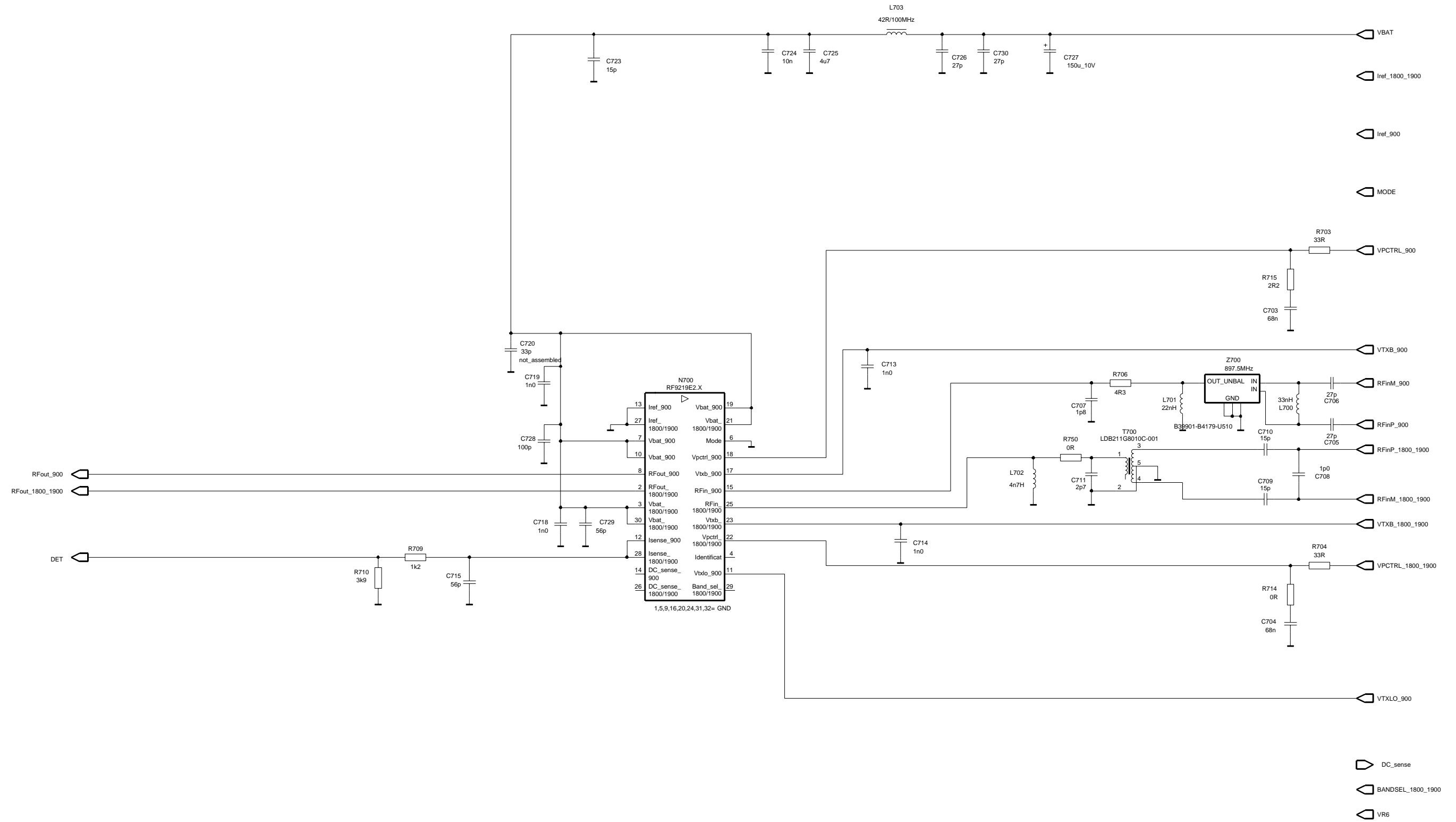
RF Shields and Vias

BB GLOBAL GND HOLES

RF GLOBAL GND HOLES



Power Amplifier and Detection



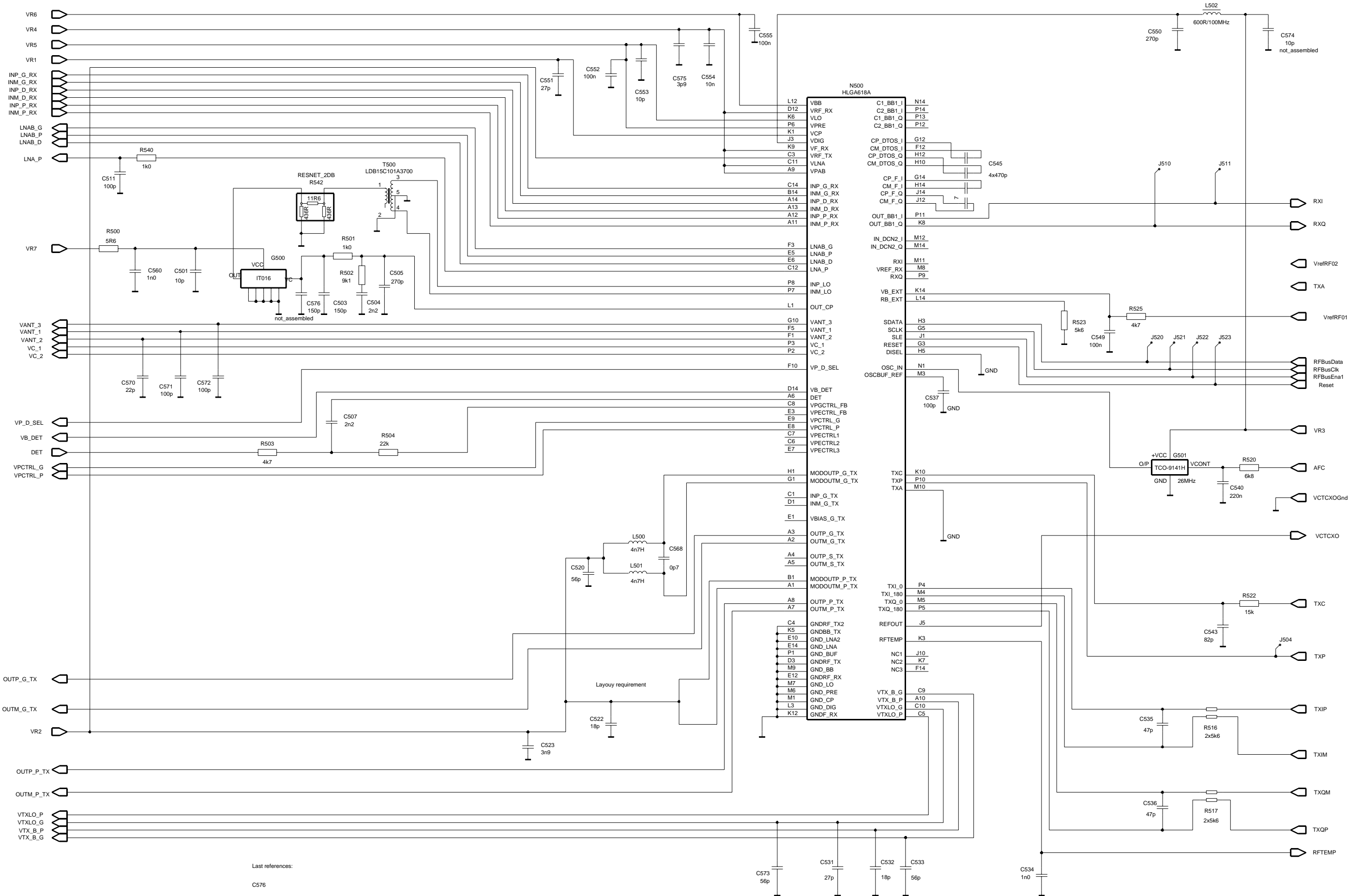
Last references:

C729

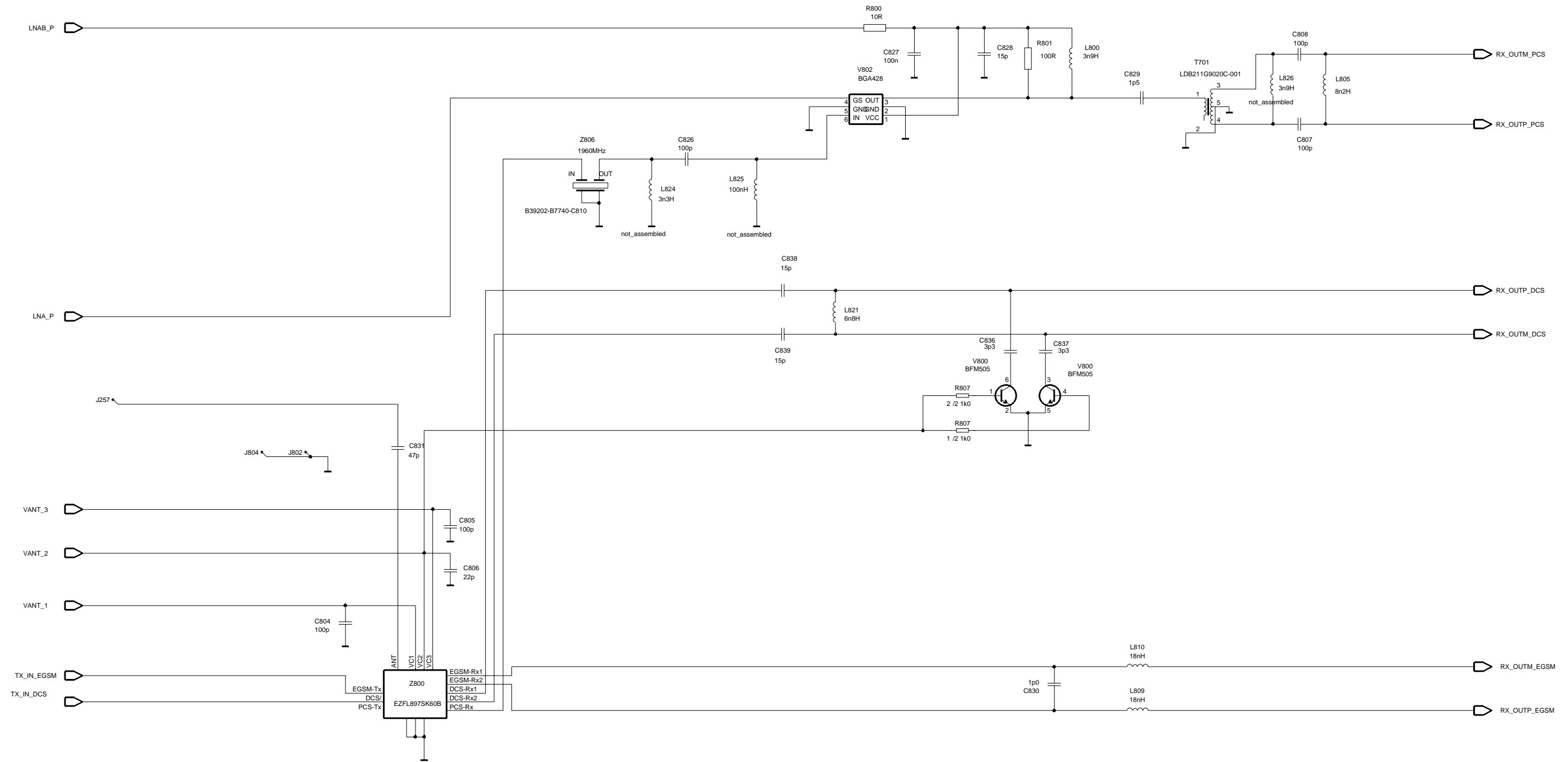
R715

L704

HELGA



RX Front End and Antenna Switch



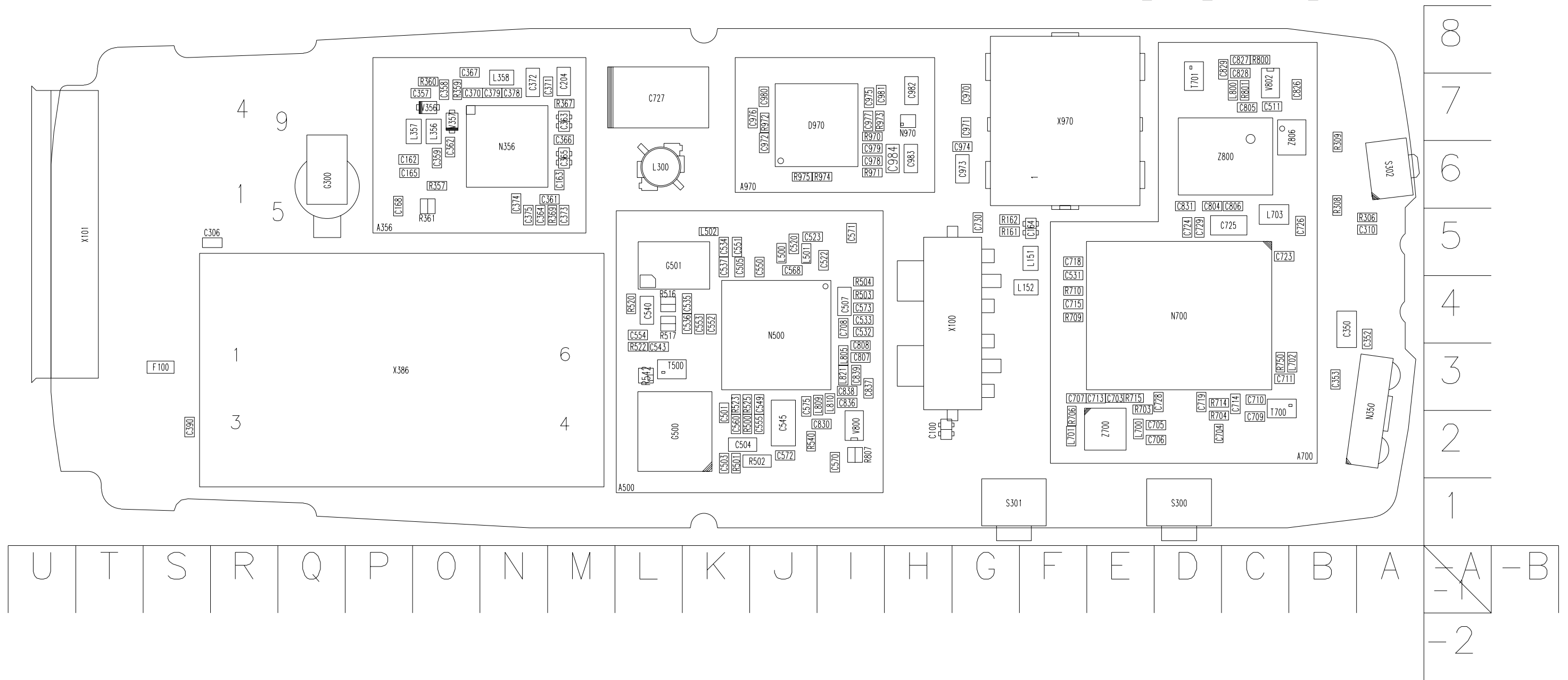
Last references:

C835

R807

L825

Assembly Values Diagram Bottom



Assembly Values Diagram Top

